

I claim:

1. A machine tool for performing a machine tool function including a plurality of components adapted to cooperate with each other to execute the machine tool function, the machine tool having:
  - a plurality of constituent parts;
  - a plurality of sheets of damping material; and
  - each said component comprising at least two of said constituent parts and at least one of said sheets, said at least one sheet being interposed between said at least two constituent parts, for limiting vibration of the machine tool while performing the machine tool function.
2. A machine tool according to claim 1 in which each said constituent part includes at least one first surface adapted to cooperate with an at least one second surface on an adjacent constituent part to define a slot in which said at least one sheet is receivable, said at least one sheet being interposed between said at least one first surface and said at least one second surface to form said component.
3. A machine tool according to claim 1 in which each said sheet is substantially planar.
4. A machine tool according to claim 1 in which each said sheet is substantially non-resilient.
5. A machine tool according to claim 1 in which each said sheet is substantially impermeable.
6. A machine tool according to claim 5 in which each said sheet comprises polyvinylchloride.

7. A machine tool according to claim 2 in which said at least one first surface and said at least one second surface are positioned substantially parallel to each to define said slot.
8. A machine tool according to claim 1 in which each said constituent part is substantially rigid.
9. A machine tool according to claim 8 in which each said constituent part comprises steel.
10. A machine tool for performing a machine tool function including a plurality of components adapted to cooperate with each other to execute the machine tool function, the machine tool having:
  - a plurality of constituent parts;
  - a plurality of linings for damping vibration of the machine tool during performance of the machine tool function;
  - each said component comprising at least two of said constituent parts and at least one of said linings sandwiched therebetween;
  - and
  - one of said at least two constituent parts having at least one first mating surface adapted to cooperate with at least one second mating surface of the other of said at least two constituent parts to define a slot for receiving said at least one lining, said at least one lining being configured to maintain contact with said at least one first mating surface and with said at least one second mating surface when said at least one lining is positioned therebetween such that vibration of the machine tool during performance of the machine tool function is damped by said at least one lining.

11. A machine tool according to claim 10 in which each said lining is substantially planar.
12. A machine tool according to claim 11 in which said at least one first mating surface and said at least one second mating surface are positioned substantially parallel to each other upon assembly of said constituent parts and said linings to form said components.
13. A machine tool according to claim 10 in which each said lining is substantially non-resilient.
14. A machine tool according to claim 13 in which each said lining is substantially impermeable.
15. A machine tool according to claim 14 in which each said lining comprises polyvinylchloride.
16. A machine tool according to claim 10 in which each said constituent part is substantially rigid.
17. A machine tool according to claim 16 in which each said constituent part comprises steel.
18. A method of damping vibration of a machine tool, the machine tool being adapted to perform a machine tool function and including a plurality of machine tool components adapted to cooperate with each other to execute the machine tool function, the method comprising the steps of:
  - (a) providing at least two constituent parts for each said component;
  - (b) providing at least one sheet of damping material for each said component;

- (c) forming each said component by interposing said at least one sheet of damping material between said at least two constituent parts; and
  - (d) assembling said components into the machine tool, whereby said at least one sheet of damping material dampens vibration of the machine tool during performance of the machine tool function.
19. A method according to claim 18 in which each said sheet of damping material comprises polyvinylchloride.
20. A method according to claim 18 in which each said constituent part comprises steel.
21. In a machine tool adapted for performing a machine tool function, the machine tool including a plurality of components adapted for cooperation with each other to execute the machine tool function, the improvement comprising each said component including at least two constituent parts, one of said at least two constituent parts having at least one first surface and the other of said at least two constituent parts having at least one second surface positioned parallel to said at least one first surface to define an aperture therebetween, and at least one sheet of damping material receivable in the aperture between said at least one first surface and said at least one second surface to be sandwiched therebetween, for dampening vibration of the machine tool.